

ABSTRACT

Described is a method and system in which timing intervals are generated from clock properties, and used to interpolate values for smooth animation. A high-level component maintains a set of clocks related to animated objects and/or linear media in a scene graphs. The clocks correspond to clock properties received from an application program. The clocks are processed into event lists at the higher level, from which timing interval data is generated and passed to a low-level component. The low-level component, which generally operates at a faster rate than the high-level component, uses the timing interval data to rapidly calculate current values for an animated object. Interaction, such as to pause an animation or resume a paused animation, causes the high-level component to re-compute the event list and regenerate new animation intervals for affected clocks. The new animation intervals are passed and used by the lower-level component.